

**DIRECT BUILD-UP LAYER ON AN ENCAPSULATED DIE PACKAGE
HAVING A MOISTURE BARRIER STRUCTURE**

ABSTRACT OF DISCLOSURE

5 A packaging technology that fabricates a microelectronic package including
build-up layers, having conductive traces, on an encapsulated microelectronic die
and on other packaging material that surrounds the microelectronic die, wherein an
moisture barrier structure is simultaneously formed with the conductive traces. An
exemplary microelectronic package includes a microelectronic die having an active
10 surface and at least one side. Packaging material(s) is disposed adjacent the
microelectronic die side(s), wherein the packaging material includes at least one
surface substantially planar to the microelectronic die active surface. A first
dielectric material layer may be disposed on at least a portion of the microelectronic
die active surface and the encapsulation material surface. At least one conductive
15 trace is then formed on the first dielectric material layer to electrically contact the
microelectronic die active surface. A barrier structure proximate an edge of the
microelectronic package is formed simultaneously out of the same material as the
conductive traces.

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